Access DB#_____

SEARCH REQUEST FORM

Scientific and Technical Inf rmation Center

Requester's Full Name: BEN SACKEY Examiner #: 73589 Date: 12/12/02
Art Unit: 1626 Phone Number 30 5-6885 Serial Number: 10/066,801
Mail Box and Bldg/Room Location: CM1 6E11 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

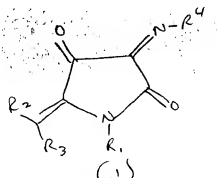
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Substituted Pyrrolidine-2,3,4-Trion-3-Oxime Derivatives

Inventors (please provide full names): Dr Zewesny et al.

Earliest Priority Filing Date: _____

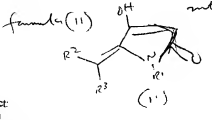
***For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.**



(I)

R_1 is H, OR^9, OH, SR^9, COR^9, $COOR^9$ etc
R_2 and R_3 are independently H, F, Cl, Br, CF_3 etc
R^4 is H, OH, OR^5, SR^5, COR^5, $COOR^5$, $COLO$, $CONR^6R^7$, $CSNR^6R^7$ or C_{1-10} alkyl

and also method of preparing formula (I) comprising reacting tetramic acid of formula (II)



(II)

with an agent such as of Sodium nitrite in an ice-cooled solution.

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Point of Contact:
Barb O'Bryen
Technical Information Specialist
STIC CM1 6A05 308-4291

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STAFF USE ONLY		Type of Search		Vendors and cost where applicable	
Searcher:	BOB	NA Sequence (#)		STN	339
Searcher Phone #:		AA Sequence (#)		Dialog	
Searcher Location:		Structure (#)	4	Questel/Orbit	
Date Searcher Picked Up:	12-18-02	Bibliographic		Dr.Link	
Date Completed:	12-18-02	Litigation		Lexis/Nexis	
Searcher Prep & Review Time:	30	Fulltext		Sequence Systems	
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Online Time:	13	Other		Other (specify)	

PTO-1590 (8-01)

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NEWS 10 Jun 10 MEDLINE Reload
NEWS 11 Jun 10 PCTFULL has been reloaded
NEWS 12 Jul 02 FOREGE no longer contains STANDARDS file segment
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NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS 20 Aug 19 IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22 Aug 26 Sequence searching in REGISTRY enhanced
NEWS 23 Sep 03 JAPIO has been reloaded and enhanced
NEWS 24 Sep 16 Experimental properties added to the REGISTRY file
NEWS 25 Sep 16 Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 26 Sep 16 CA Section Thesaurus available in CAPLUS and CA
NEWS 27 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985
NEWS 28 Oct 21 EVENTLINE has been reloaded
NEWS 29 Oct 24 BEILSTEIN adds new search fields
NEWS 30 Oct 24 Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 31 Oct 25 MEDLINE SDI run of October 8, 2002
NEWS 32 Nov 18 DKILIT has been renamed APOLLIT
NEWS 33 Nov 25 More calculated properties added to REGISTRY
NEWS 34 Dec 02 TIBKAT will be removed from STN
NEWS 35 Dec 04 CSA files on STN

NEWS EXPRESS October 14 CURRENT WINDOWS VERSION IS V6.01,
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),

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                AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
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STRUCTURE FILE UPDATES:   11 DEC 2002  HIGHEST RN 475975-25-8
DICTIONARY FILE UPDATES:  11 DEC 2002  HIGHEST RN 475975-25-8

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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COST IN U.S. DOLLARS                                 SINCE FILE      TOTAL
                                                        ENTRY    SESSION
FULL ESTIMATED COST                                      0.38       0.59
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FILE COVERS 1907 - 12 Dec 2002 VOL 137 ISS 24
FILE LAST UPDATED: 11 Dec 2002 (20021211/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

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E1            1     DE19936520/PN
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E3            0 --> DE199365210/PN
E4            1     DE19936524/PN
E5            1     DE19936543/PN
E6            1     DE19936545/PN
E7            1     DE19936547/PN
E8            1     DE19936548/PN
E9            1     DE19936549/PN
E10           1     DE19936552/PN
E11           1     DE19936556/PN
E12           1     DE19936563/PN

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E11           1     DE19936556/PN
E12           1     DE19936563/PN

=> s e3
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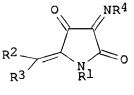
L1 1 DE19936521/PN

=> d l1 all

L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
AN 2001:115115 CAPLUS
DN 134:162915
TI Preparation of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists.
IN Przewosny, Michael; Stachel, Hans-Dietrich; Poschenrieder, Hermann
PA Grunenthal G.m.b.H., Germany
SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DT Patent
LA German
IC ICM C07D207-02
ICS A61K031-4015; A61P025-04; A61P029-00
CC 27-10 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001010831	A1	20010215	WO 2000-EP7101	20000725
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	DE 19936521	A1	20010215	DE 1999-19936521	19990806 <--
	BR 2000013313	A	20020416	BR 2000-13313	20000725
	EP 1200400	A1	20020502	EP 2000-945950	20000725
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	NO 2002000578	A	20020325	NO 2002-578	20020205
PRAI	DE 1999-19936521	A	19990806		
	WO 2000-EP7101	W	20000725		

OS MARPAT 134:162915
GI



I

AB Title compds. (I; R1 = H, OR8, COR5, NR6R7, CO2R5, CONR6R7, CSNR6R7, alkyl, aryl, heteroaryl, aralkyl; R2, R3 = H, F, Cl, Br, CF3, OR8, SR8, alkyl, aryl, heteroaryl, aralkyl; R4 = OH, H, OR8, SR8, COR5, CO2R5, COCOR5, CONR6R7, CSNR6R7, alkyl, aryl, heteroaryl, aralkyl; R5 = H, alkyl,

aryl, heteroaryl, aralkyl; R6, R7 = H, OR8, COR5, CO2R5, alkyl, aryl, heteroaryl, aralkyl; R8 = alkyl, aryl, heteroaryl, aralkyl), were prepd. 4-Hydroxy-5-(methoxyphenylmethylene)-1,5-dihydropyrrol-2-one in HOAc was treated with NaNO2 followed by stirring for 30 min. to give 60% 5-(methoxyphenylmethylene)pyrrolidin-2,3,4-trione 3-oxime. The latter bound to the glycine binding site of NMDA receptors with Ki = 0.116 .mu.M.

ST pyrrolidinetrione oxime prepn NMDA receptor antagonist; analgesic pyrrolidinetrione oxime prepn; antiinflammatory pyrrolidinetrione oxime prepn; antidepressant pyrrolidinetrione oxime prepn; drug abuse treatment pyrrolidinetrione oxime prepn; alcoholism treatment pyrrolidinetrione oxime prepn; cardiovascular agent pyrrolidinetrione oxime prepn; antipsychotic pyrrolidinetrione oxime prepn; antiparkinsonian pyrrolidinetrione oxime prepn

IT AIDS (disease)
(AIDS dementia complex, treatment; prepn. of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists)

IT Mental disorder
(AIDS dementia, treatment; prepn. of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists)

IT Brain, disease
(Gilles de la Tourette syndrome, treatment; prepn. of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists)

IT Nervous system
(Huntington's chorea, treatment; prepn. of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists)

IT Glutamate antagonists
(NMDA antagonists; prepn. of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists)

IT Drugs of abuse
(abuse of, treatment; prepn. of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists)

IT Brain, disease
(edema, treatment; prepn. of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists)

IT Stomach, disease
(gastritis, treatment; prepn. of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists)

IT Bladder
(incontinence, treatment; prepn. of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists)

IT Brain, disease
(infarction, treatment; prepn. of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists)

IT Brain, disease
(ischemia, treatment; prepn. of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists)

IT Analgesics
Anti-Alzheimer's agents
Anti-inflammatory agents
Anticonvulsants
Antidepressants
Antidiarrheals
Antiparkinsonian agents

Antipsychotics
Antitussives
Anxiolytics
Cardiovascular agents
(prepn. of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists)

IT Oximes
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists)

IT Brain, disease
(stroke, treatment; prepn. of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists)

IT Respiratory tract
(treatment of airway disease; prepn. of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists)

IT Asphyxia
(treatment of perinatal asphyxia; prepn. of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists)

IT Alcoholism
Encephalomyelitis
Hypoxia, animal
(treatment; prepn. of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists)

IT 247901-14-0P 247901-15-1P 247901-16-2P 247901-17-3P 247901-18-4P 247901-19-5P 247901-20-8P 247901-30-0P 247901-45-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists)

IT 106237-90-5 247901-78-6 247901-79-7 247901-80-0 247901-81-1 247901-82-2 247901-83-3 247901-84-4 325773-48-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of pyrrolidine-2,3,4-trion-3-oximes as NMDA receptor antagonists)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE
(1) Gruenenthal Gmbh; EP 0894497 A 1999 CAPLUS
(2) Pfizer Ltd; WO 9608485 A 1996 CAPLUS
(3) Poschenrieder; CAPLUS
(4) Poschenrieder; ARCH PHARM (WEINHEIM, GER) 1998, V331(12), P389 CAPLUS
(5) Poschenrieder, H; ARCH PHARM 1999, V332(9), P309 CAPLUS
(6) Rowley, M; TETRAHEDRON 1992, V48(17), P3557 CAPLUS